

WHAT IS CLAIMED IS:

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1. An apparatus for dividing, compressing and transmitting video data that uses a plurality of channels for transmission, at least comprising:

5 a first encoding section for encoding an original picture and transmitting it with a first channel;

a first compensation section for generating a first compensated original picture obtained by adding and subtracting to/from said original picture a value obtained  
10 by dispersing an encoding error occurred in said first encoding section to the remaining channels; and

a second encoding section for encoding said first compensated original picture and transmitting it through a second channel.

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2. An apparatus for dividing, compressing and transmitting video data according to claim 1, wherein when said first compensated original picture is designated as  
20 S(2), said S(2) is expressed by the following expression (3);

$$S(2) = \{(S(1) - C(1)) / (N-1) + S(1) \dots (3)$$

wherein S(1) denotes an original picture, C(1) denotes decoded data, and N denotes the total number of channels.

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3. An apparatus for dividing, compressing and transmitting video data according to claim 1, further comprising:

an i-th ( $i = 2, 3, \dots, N-1$ ) compensation section for  
5 generating an i-th compensated original picture obtained by adding and subtracting to/from said original picture a value obtained by dispersing an encoding error occurred in an i-th encoding section to the remaining channels; and

an (i + 1)-th encoding section for encoding said i-th  
10 compensated original picture and transmitting it through an (i + 1)-th channel.

4. An apparatus for dividing, compressing and  
15 transmitting video data according to claim 3, wherein when said i-th compensated original picture is designated as  $S(i + 1)$ , said  $S(i + 1)$  is expressed by the following expression (4);

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$$S(i + 1) = [S(1) \times i - \sum_{k=1}^i C(k)] / (N - i) + S(1) \quad \dots (4)$$

wherein  $S(1)$  denotes an original picture,  $C(k)$  denotes decoded data, and  $N$  denotes the total number of channels.